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## ABSTRACT

This study examined the impact of 3 years of full inclusion of students with severe disabilities in a Lansing (Michigan) high school. Teacher and parent surveys as well as observations of student interactions and classrooms were used to evaluate inclusion of seven students with low-incidence disabilities (autistic impairment, trainable mental impairment, severe mental impairment, and severe multiple impairments). In general, parents reported positive changes in family life with increased interactions with family friends and neighbors, decreased behavioral problems, but increased parenting stress. Both special and general education teachers reported that information sharing, development of instructional materials, and support from consultants and paraprofessionals were effective. Similarly, both groups of educators reported that in-service programs, staff development activities, and technical assistance from the district were ineffective. Parents and teachers agreed that students' in-school opportunities for interaction with nondisabled students were enhanced in the inclusive setting. Observation of classrooms found interactions between included students and nondisabled peers to be overwhelmingly accepting. Classroom observations also indicated that paraprofessionals assisted the included students in understanding directions but tended to dominate the student's interactions. Implications for improved staff development in the future are discussed. (Contains 13 references.) (DB)

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# **THE IMPACT OF INCLUSION OF STUDENTS WITH CHALLENGING NEEDS**

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## **Introduction**

A number of researchers recently have concentrated their efforts on evaluating inclusive education programs in order to facilitate data-based educational decision making (Bang, 1992; Bender, 1985, 1986, 1988; Bender, Smith, & Frank, 1988; Bender & Ukeje, 1989; Ysseldyke & Christenson, 1987a, 1987b). Physical inclusion of students with disabilities does not guarantee a quality education. Therefore, an increasing number of researchers have emphasized instructional inclusion as well as social inclusion in inclusive schools. Recent efforts to increase collaboration between general education and special education necessitate that special and general educators work toward consensus on defining appropriate outcomes and content standards for all students (Brauen, O'Reilly, & Moore, 1994).

Including students with disabilities may not be a simple matter. It is important to create a shared vision among students with disabilities, their families, educators, service providers, and significant community members (Lehmann, Deniston, Tobin, & Howard, 1996). Graden and Bauer (1992) suggested that all school members may need to work together to achieve successful social and educational inclusion of students with disabilities. A positive, trusting partnership among school members is essential for effective collaboration. Classroom teachers can share their expertise in large-group management skills and curriculum, and school psychologists can share their expertise in learning processes and individual differences (Graden & Bauer, 1992). Special education teachers can share their in-depth knowledge regarding the adaptation of instructional materials, the

development of Individualized Educational Plans (IEP), and behavior management procedures (Bauwens, Hourcade, & Friend, 1989).

Graden and Bauer (1992) further suggested that classroom teachers are the key decision makers in shared problem solving to adapt instruction to the needs of individual students in inclusive education classes. Four types of support for inclusive classrooms are (a) financial, informational, and human resource support for including all students in regular school life; (b) moral support to encourage fellow educators to express their ideas and feelings and to provide constructive feedback to each other; (c) technical support for designing curricular and instructional methods by offering concrete strategies, approaches, or ideas; and (d) evaluative support for monitoring student learning and instructional adjustment (York, Giangreco, Vandercook, & Macdonald, 1992). Bang (1992) found that collaboration with special education teachers, including a building principal's support, was significantly related to general education teachers' use of instructional strategies that facilitate inclusion of students with moderate and severe disabilities.

### **Description of Holt High School**

Holt High School is a suburban school adjacent to the state capital, Lansing. The school has an enrollment of 1,200 students in grades 10 through 12 including 156 with disabilities. Holt High School has a tradition of innovation. The proximity to Michigan State University (MSU) made this school a natural choice as a site for a Professional Development School (PDS). Since the development of this school/university partnership in 1988, the faculty have made more than 100 presentations or papers at state and national conferences about the changes they have made in their teaching practice. Teachers have

collaborated with their colleagues at MSU in writing more than 20 papers about their work. The primary focus of this joint work has been restructuring teaching and learning to develop conceptual understanding for all students.

During this same period, the school district hired a special education director who was committed to a districtwide reform initiative to mainstream students with mild disabilities and to include students with severe disabilities enrolled in elementary and middle school into general education. The district supported teachers in their efforts to foster inclusive practices by weighting special education students in the classroom count; that is, each special education student was equivalent to two students, thereby reducing class size. In addition, as determined by the Individualized Educational Planning Committee (IEPC), paraprofessionals were provided to assist students with severe disabilities who were included in general education classrooms. However, very little staff development and technical assistance was offered to either special or general education teachers and paraprofessionals to implement this initiative.

At the high school, students with mild disabilities were mainstreamed into general education courses, and special and general educators began team teaching. The restructuring initiatives of the PDS and the special education reform at Holt High School provided a golden opportunity for general and special educators to work collaboratively to develop curriculum and assessments to better meet the needs of all students. Over the last eight years, a very collaborative culture has evolved between general and special education teachers as a result of these experiences.

Three years ago, Holt high students with severe disabilities were fully included. High school general and special education teachers and administrators formed a discussion group to address issues and concerns about the inclusion of students with severe disabilities. Three students with severe disabilities were included the first year: an autistic student, a severely hearing impaired student, and a severely visually impaired student. Currently, seven students with severe disabilities are enrolled at Holt High School.

The project director of Project: Education Plus, a federal restructuring grant to include students with disabilities, and the grant researcher were interested in studying inclusive practices for students with disabilities at the high school. To determine the effect of inclusive education options on students, parents, and school personnel, comprehensive data-based evaluation of the inclusive education option is required. Four research questions were posed: (a) What are the effects of inclusion of students with challenging needs on the students' family life? (b) What are the effects of inclusion of students with challenging needs on teacher collaboration and support? (c) What are the effects of inclusion on interactions between general education students and students with challenging needs? and (d) What are the effects of inclusion of students with challenging needs on teachers' instructional formats?

### **Effect of Inclusive Education**

For the purpose of this paper, inclusive education was defined as the placement of students from low-incidence disability categories in age-appropriate general education classrooms with support. The low-incidence disability categories represented in this study

are, using Michigan terminology, autistic impairment (AI), trainable mental impairment (TMI), severe mental impairment (SMI), and severe multiple impairments (SXI).

The sample for this study comprised seven high school students with challenging needs (2 boys and 5 girls) placed in an inclusive high school. The mean percent of time (hours/school week) they were included in a general education classroom was 65%. This percentage has been referred to as the student's Full-Time Equivalency (FTE) in general education. Data were collected through teacher survey, parent survey, and observation of student interactions and instructional formats.

### **Effect of Inclusion on Students' Family Life**

Parents were asked about the types of concerns they might have had before their child was placed in a general education classroom. Preplacement concerns of parents were as follows (1 = the strongest concern; 7 = the weakest concern).

1. Limited support services.
2. Social isolation.
3. Being teased by other students.
4. Lower quality of the education.
5. Losing skills already attained.
6. Child's health.
7. Complaints from other parents.

Parents gave several reasons for selecting an inclusive education option. The most important reason was coded 1, and the least important reason was coded 5. The reasons were as follows:

1. Interaction with nondisabled students.
2. Opportunities to develop skills.
3. Close to home.
4. Siblings attending same school.
5. Recommended by teaching staff.

In general, parents reported positive changes in family life since their children had been included in general education settings. Those positive changes were: (a) increased interactions with family friends, (b) increased interactions with neighbors, (c) decreased behavioral problems presented by the child, and (d) taking the child to more public places. Parents reported negative change in the stress of parenting--that is, the stress of parenting increased.

### **Teacher Collaboration and Support**

General and special education teachers of the students in this study were asked to report the kinds of collaboration and support they requested and the effectiveness of the collaboration and support they received while teaching in an inclusive education program. Six special education teachers and 14 general education teachers responded to the survey.

Special education teachers reported that teacher collaboration and support were very **effective** in the following areas:

1. Student information sharing with general education staff.
2. Working with general education staff to develop instructional materials for students with challenging needs.
3. Support from the special education administrator.



4. Support from speech therapists and social workers.
5. Support from paraprofessional staff.
6. Team-teaching activities.

Special education teachers reported that teacher collaboration and support were very **ineffective** in the following areas:

1. In-service programs on the education of students with challenging needs.
2. Staff development activities designed to anticipate instructional needs in implementing inclusive education.
3. Staff development activities designed to facilitate inclusive education partnerships between general and special education staff.
4. Technical assistance to help them view students with challenging needs as full partners in the educational system.
5. Technical assistance to help them institute a data-based decision-making model to monitor the progress of students with challenging needs.

Similarly, general education teachers reported that teacher collaboration and support were very **effective** in the following areas:

1. Information sharing with special education staff.
2. Ongoing educational planning.
3. Working with special education staff to evaluate and test the performance of students with challenging needs.
4. Working with special education staff to develop instructional materials for students with challenging needs.

5. Support from speech therapists and social workers.
6. Support from paraprofessional staff.

General education teachers reported that teacher collaboration and support were very **ineffective** in the following areas:

1. In-service programs on the education of students with challenging needs.
2. Support from the building principal.
3. Technical assistance to help them identify student outcomes for students with challenging needs.
4. Technical assistance to help them institute a data-based decision-making model to monitor the progress of students with challenging needs.
5. Technical assistance to help them implement behavioral management strategies in working with students with challenging needs.
6. Technical assistance to help them implement instructional formats that address the unique educational needs of students with challenging needs.

In summary, both special and general education teachers reported that information sharing, the development of instructional materials, and support from consultants and paraprofessionals were effective. Similarly, both groups of educators reported that in-service programs, staff development activities and technical assistance from the district were ineffective in supporting their efforts to develop inclusive practices. Ineffectiveness, in this case, meant a particular type of support was not provided. As stated above, although it is interested in fostering a more inclusive school environment for students with mild and

severe disabilities, the school district has never developed a strategic plan to provide professionals or paraprofessionals with staff development and technical assistance.

### **Students' Interactions With Nondisabled Peers**

Parents and general education teachers were asked to report on included students' opportunities for interaction with nondisabled students, both in and out of school, and to characterize the quality of in-school interactions. In-school interaction opportunities included (a) riding the same school bus that nondisabled students ride, (b) eating lunch at the same table in the school cafeteria with non-disabled classmates, (c) sharing free time with nondisabled classmates, (d) attending special events with nondisabled classmates, and (e) participating in learning groups with nondisabled classmates. Out-of-school interaction opportunities included (a) making and receiving phone calls to/from nondisabled classmates, (b) inviting non-disabled classmates to the included student's house and being invited to the houses of nondisabled classmates, (c) participating in after-school activities with nondisabled classmates, and (d) going places outside of school with nondisabled classmates.

Parents' responses indicated that their child's in-school opportunities for interaction with non-disabled students were enhanced in an inclusive education placement (rated as "often"). On the other hand, opportunities for student interaction with nondisabled students in out-of-school settings, as perceived by parents, did not appear to have been enhanced by placement in an inclusive education setting (rated as "rarely").

General education teachers' responses to items related to opportunities for interaction between included and nondisabled students paralleled the responses of parents regarding in-school interactions and their enhancement by an inclusive education placement.

### **Student Interactions in Classroom Settings**

In an effort to investigate the frequency of interaction and the types of responses to interactions between included students and nondisabled students, two researchers observed seven included students with challenging needs in their school setting. Each student was observed for approximately two hours in two different educational settings. The inter-rater reliability was .88. The structured observations indicated that when interactions with nondisabled students did occur, the included students initiated these interactions about 50% of the time. Concerning the types of responses between included students and nondisabled students, the researchers identified and recorded responses, as they occurred, as "accepting," "rejecting," or "no response." Included students received primarily accepting responses when they initiated interactions with nondisabled students (accepting = 95%; rejecting = 0%; no response = 5%). Nondisabled students received primarily accepting responses when they initiated interactions with included students (accepting = 94%; rejecting = 2%; no response = 4%).

In sum, interactions between included students and their nondisabled peers were observed to be overwhelmingly accepting, regardless of who initiated the interaction.

### **Instructional Formats**

Researchers used a time-sampling procedure to identify and record instructional and organizational formats that the classroom teacher was using for nondisabled students. In addition, they identified and recorded, within the same time frame, the participation of an included student. Each of seven included students was observed in his or her instructional setting by two researchers for two hours. The inter-rater reliability was .93. In the same

room at the same time, the included students were more engaged than nondisabled students with the tutorial assistance of a paraprofessional (included = 36% vs. nondisabled = 0%). This is not surprising, given that the paraprofessionals sat beside the included students and assisted only them, whereas the nondisabled students who needed assistance had to wait for the teacher. However, although the included students were more engaged with the assigned work, they were less engaged in teacher-directed instruction (included = 42% vs. nondisabled = 59%), in independent seatwork (included = 6% vs. nondisabled = 18%), and in small-group learning with nondisabled peers (included = 7% vs. nondisabled = 15%). Again, these outcomes reflect the fact that the paraprofessionals remained with the included students during the assigned work time, and therefore those students became more engaged with the paraprofessional than the teacher.

These data indicate that the paraprofessional was both a help and a hindrance to the included secondary students. Although the paraprofessional was of great assistance to the included students in understanding directions and staying focused on tasks, those students become so absorbed in their small-group interactions with the paraprofessional that their engagement with the teacher and their non-disabled peers became limited.

### **Conclusion**

Special and general education teachers at Holt High School have been very committed to developing inclusive settings for all students with disabilities over the last eight years. For the last three years, they have worked to include students with severe disabilities as well. The district has supported their efforts by reducing class size through weighting

special education students and providing paraprofessionals for students with severe disabilities in general education. In this study it was found that the inclusion of students with severe disabilities affected their family life in several positive ways by increasing their interactions with family friends and neighbors and diminishing their behavioral problems. However, the stress of parenting increased.

Both general and special education teachers reported an effective collaboration with each other in developing instructional materials and in accessing support from the speech and language teachers, social workers, and paraprofessionals. At the same time, both groups of teachers reported that the school district has been very ineffective in providing staff development opportunities and technical assistance in behavior management and in developing student outcomes.

The quality of interactions between included students and their nondisabled peers has been very accepting regardless of which student initiated the interaction. The inclusion of students with severe disabilities had had a limited effect on the classroom teachers' format because students with severe disabilities sat together with a paraprofessional. When the general education teachers were questioned about seating arrangements, they all reported that the included students chose to sit together, even if they were initially more integrated at the beginning of the class.

### **Implications**

1. Although Holt School District has supported the development of inclusion in several ways, it has not provided general and special education teachers with the staff

development and technical assistance they would like to develop student outcomes and behavior management plans. Also, although the teachers at Holt High School have demonstrated a strong commitment and willingness to include all students and the student social outcomes have been positive, one wonders what will happen to this commitment without a district plan for technical assistance when the population of students with severe disabilities doubles to 14 next year.

2. The staff development plan needs to include training for paraprofessionals regarding the development of autonomy, self-determination, and self-advocacy skills. All of these elements are vital to the successful transition of students with disabilities to adult life. Perhaps, if paraprofessionals' role was redefined to assist the teacher with all students, then students with severe disabilities would ask for more direct assistance from the teacher and nondisabled peers.

Clearly, the development of inclusive practices for students with severe disabilities has many strengths: a collaborative culture, a supportive relationship between general and special educators, a student body that is very accepting of students with special needs, and paraprofessional support. However, in order for this program to develop further, a team of special and general education teachers, paraprofessionals, the high school principal, the special education director, and parents needs to jointly develop a vision for this initiative and to construct a strategic plan to secure the resources for the staff development and technical assistance necessary to enact their vision.

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